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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,928	11/13/2001	Christopher Cavallaro	20002-0107	6414
23517	7590	10/06/2004	EXAMINER	
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP			LEE, EDMUND H	
3000 K STREET, NW			ART UNIT	PAPER NUMBER
BOX IP				1732
WASHINGTON, DC 20007				

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/986,928	CAVALLARO ET AL.
Examiner	Art Unit	
EDMUND H. LEE	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 14 July 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 33-41 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-32 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/13/02</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

### DETAILED ACTION

1. Claims 33-41 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/14/04.
2. Applicant's election without traverse of claims 1-32 in the reply filed on 7/14/04 is acknowledged.
3. Claims 1-5, 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because performance of the steps does not make a golf ball. The preamble recites a method of making a golf ball but there are no steps for making a golf ball.

Claim 23 is indefinite because it is confusing as to whether a subassembly is actually heated to a temperature less than the first temperature. Heating implies an increase in temperature not a decrease in temperature.

Clarification and/or correction is required.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Calabria et al (USPN 5733428) as evidenced at col 5, Ins 38-65. It should be mentioned that it is inherent that the material be maintained at a temperature less than about 130F because above that temperature the material will begin to cure.

6. Claims 25-28 and 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Calabria et al (USPN 5733428) as evidenced at col 5, Ins 38-65. It should be mentioned that it is inherent that the material be maintained at a temperature less than about 130F because above that temperature the material will begin to cure.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calabria et al (USPN 5733428) in view of Oda (USPN 4647274). In regard to claim 1, Calabria et al teach the basic claimed process including a method of making a golf ball (figs 1-15); and mixing a first material and a second material in a mixer, wherein a cooling jacket is used to cool the mixer (col 5,Ins 38-65; fig 6); cooling the mixer (col 5, Ins 38-65; fig 6). Calabria et al, however, do not teach using a liquid to cool the mixer. Oda teaches cooling a molding material by using a water jacket filled with a flow of

cooling water (col 5, Ins 1-8; fig 1). Calabria et al and Oda are combinable because they are analogous with respect to using a cooling jacket to cool a molding material. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a flow of cooling water as taught by Oda in the cooling jacket of Calabria et al in order to effectively and efficiently cool the molding material of Calabria et al. In regard to claims 2-3, such is taught by Calabria et al (col 6,Ins 53-58). In regard to claim 4, such is taught by Calabria et al (col 5, Ins 65-67). In regard to claim 5, such is taught by Calabria et al (col 5, Ins 1-7).

9. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calabria et al (USPN 5733428) in view of Oda (USPN 4647274) as applied to claim 1 above and further in view of Hwang (USPN 5952415). In regard to claim 6, Calabria et al do not teach the cooling a golf ball subassembly such that the subassembly undergoes a volumetric reduction; and applying a cover layer of cover material over the volumetrically reduced golf ball subassembly. Hwang teaches cooling a golf ball subassembly such that the subassembly undergoes a volumetric reduction (col 1, Ins 62-65; col 3, Ins 20-44; col 4, Ins 56-57; col 5, In 46-col 6, In 3); and applying a cover layer of cover material over the volumetrically reduced golf ball subassembly (col 1, Ins 62-65; col 3, Ins 20-44; col 4, Ins 56-57; col 5, In 46-col 6, In 3). Calabria et al and Hwang are combinable because they are analogous with respect to mold golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teachings of Hwang into the process of Calabria et al in order to form a golf ball with more energy. In regard to claim 7, such is taught by

Calabria et al at fig 6. In regard to claim 8, it is well-known in the molding to injection mold a cover layer. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to injection mold the cover of Calabria et al in order to reduce cycle time without sacrificing quality.

10. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calabria et al (USPN 5733428) in view of Oda (USPN 4647274) Hwang (USPN 5952415) as applied to claim 6 above, and further in view of Brown et al (USPN 5006297). The above teachings of Calabria et al, Oda and Hwang are incorporated hereinafter. In regard to claims 9-10, Calabria et al (modified) do not teach the claims steps of heating and holding. Brown et al teach a method of casting a golf ball cover (figs 1-2); providing a first mold half and second old half, the first and second mold halves have cavities therein (figs 1-2); heating the mold halves to a predetermined temperature (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); adding a cover material to the first mold half cavity (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); allowing the cover material to gel (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); inserting a golf ball subassembly into the first mold half cavity (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); adding the cover material to the second mold half cavity (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); mating the second mold half with the first mold half so that the cover material and the golf ball subassembly are contained within the cavities in the mold halves (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); and curing the cover material to form the cover layer after the step of mating

the second mold half (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2). Brown et al also teach heating the mold halves to cure the cover material (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2). This step of heating the mold halves constitutes the claimed steps of heating a subassembly to a first temperature and holding the subassembly at the first temperature for a first time duration, heating the subassembly to a second temperature and holding the subassembly at the second temperature for a second time duration. As the temperature of the mold halves increases from being heated, it is inherent that the temperature of the subassembly is held, even for the slightest amount of time, at numerous temperatures. Calabria et al (modified) and Brown et al are combinable because they are analogous with respect to molding golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above teachings of Brown et al into the process of Calabria et al (modified) in order to efficiently mold a high quality golf ball cover.

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calabria et al (USPN 5733428) in view of Oda (USPN 4647274). The above teachings of Calabria et al are incorporated hereinafter. In regard to claim 13, Calabria et al teach the basic claimed process including a method of making a golf ball (figs 1-15); and mixing a first material and a second material in a mixer, wherein a cooling jacket is used to cool the mixer (col 5,Ins 38-65; fig 6); cooling the mixer (col 5, Ins 38-65; fig 6). Calabria et al, however, do not teach using a liquid to cool the mixer. Oda teaches cooling a molding material by using a water jacket filled with a flow of cooling water (col

5, Ins 1-8; fig 1). Calabria et al and Oda are combinable because they are analogous with respect to using a cooling jacket to cool a molding material. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a flow of cooling water as taught by Oda in the cooling jacket of Calabria et al in order to effectively and efficiently cool the molding material of Calabria et al.

12. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calabria et al (USPN 5733428) as applied to claim 11 above and further in view of Hwang (USPN 5952415). In regard to claim 14, Calabria et al do not teach the cooling a golf ball subassembly such that the subassembly undergoes a volumetric reduction; and applying a cover layer of cover material over the volumetrically reduced golf ball subassembly. Hwang teaches cooling a golf ball subassembly such that the subassembly undergoes a volumetric reduction (col 1, Ins 62-65; col 3, Ins 20-44; col 4, Ins 56-57; col 5, In 46-col 6, In 3); and applying a cover layer of cover material over the volumetrically reduced golf ball subassembly (col 1, Ins 62-65; col 3, Ins 20-44; col 4, Ins 56-57; col 5, In 46-col 6, In 3). Calabria et al and Hwang are combinable because they are analogous with respect to mold golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teachings of Hwang into the process of Calabria et al in order to form a golf ball with more energy. In regard to claim 15, such is taught by Calabria et al at col 5, Ins 38-65 and fig 6. In regard to claim 16, it is well-known in the molding art to use a liquid cooling agent. Thus, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to use a liquid cooling agent in the cooling jacket of Calabria et al in order to reduce molding complexity.

13. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calabria et al (USPN 5733428) in view of Hwang (USPN 5952415). In regard to claim 17, Calabria et al teach the basic claimed process including a method of making a golf ball (figs 1-15); and mixing a first material and a second material in a mixer, wherein a cooling jacket is used to cool the mixer (col 5, Ins 38-65; fig 6); cooling the mixer (col 5, Ins 38-65; fig 6). However, Calabria et al do not teach the cooling a golf ball subassembly such that the subassembly undergoes a volumetric reduction; and applying a cover layer of cover material over the volumetrically reduced golf ball subassembly and curing the covered subassembly. Hwang teaches cooling a golf ball subassembly such that the subassembly undergoes a volumetric reduction (col 1, Ins 62-65; col 3, Ins 20-44; col 4, Ins 56-57; col 5, In 46-col 6, In 3); and applying a cover layer of cover material over the volumetrically reduced golf ball subassembly and curing the cover subassembly (col 1, Ins 62-65; col 3, Ins 20-44; col 4, Ins 56-57; col 5, In 46-col 6, In 3). Calabria et al and Hwang are combinable because they are analogous with respect to mold golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teachings of Hwang into the process of Calabria et al in order to form a golf ball with more energy. In regard to claim 18, it is well-known in the molding art to use a liquid cooling agent. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use

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a liquid cooling agent in the cooling jacket of Calabria et al in order to reduce molding complexity.

14. Claims 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calabria et al (USPN 5733428) in view of Hwang (USPN 5952415) as applied to claim 17 above and further in view of Brown et al (USPN 5006297). In regard to claims 19 and 22, Calabria et al (modified) do not teach the claims steps of heating and holding. Brown et al teach a method of casting a golf ball cover (figs 1-2); providing a first mold half and second mold half, the first and second mold halves have cavities therein (figs 1-2); heating the mold halves to a predetermined temperature (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); adding a cover material to the first mold half cavity (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); allowing the cover material to gel (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); inserting a golf ball subassembly into the first mold half cavity (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); adding the cover material to the second mold half cavity (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); mating the second mold half with the first mold half so that the cover material and the golf ball subassembly are contained within the cavities in the mold halves (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2); and curing the cover material to form the cover layer after the step of mating the second mold half (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2). Brown et al also teach heating the mold halves to cure the cover material (col 5, Ins 22-26; col 6, Ins 56-58; col 7, Ins 1-7 and 20-25; figs 1-2). This step of heating the mold halves constitutes the claimed steps of

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heating a subassembly to a first temperature and holding the subassembly at the first temperature for a first time duration, heating the subassembly to a second temperature and holding the subassembly at the second temperature for a second time duration. As the temperature of the mold halves increases from being heated, it is inherent that the temperature of the subassembly is held, even for the slightest amount of time, at numerous temperatures. Calabria et al (modified) and Brown et al are combinable because they are analogous with respect to molding golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above teachings of Brown et al into the process of Calabria et al (modified) in order to efficiently mold a high quality golf ball cover. In regard to claims 20-21 and 23-24, such are taught by the above combination of Calabria et al and Brown et al.

15. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calabria et al (USPN 5733428) as applied to claim 25 above and further in view of Hwang (USPN 5952415). Calabria et al do not teach the cooling a golf ball subassembly such that the subassembly undergoes a volumetric reduction. Hwang teaches cooling a golf ball subassembly such that the subassembly undergoes a volumetric reduction (col 1, Ins 62-65; col 3, Ins 20-44; col 4, Ins 56-57; col 5, In 46-col 6, In 3); and applying a cover layer of cover material over the volumetrically reduced golf ball subassembly (col 1, Ins 62-65; col 3, Ins 20-44; col 4, Ins 56-57; col 5, In 46-col 6, In 3). Calabria et al and Hwang are combinable because they are analogous with respect to mold golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to include the teachings of Hwang into the process of Calabria et al in order to form a golf ball with more energy.

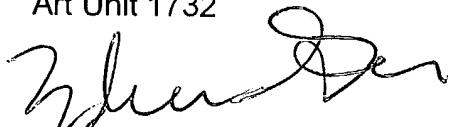
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 571.272.1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EDMUND H. LEE  
Primary Examiner  
Art Unit 1732

EHL



10/4/04